

LUZERNE COUNTY COMMUNITY COLLEGE BOARD OF TRUSTEES
Student Success & Workforce Development Committee Meeting

Thursday, June 9, 2022

4:30 PM

Committee Membership:

Dr. Bernard Graham, Committee Chair

Dr. Erin K. Keating

Robert Bertoni

Zoom Link: <https://zoom.us/j/94510849181?pwd=aFYrSEVpSXdMUW1Wd3BQN2VtTUd5dz09>

Meeting ID: 945 1084 9181 **Passcode:** 110074

Dial Option: +1 646 558 8656

AGENDA

1. April Committee Minutes (Attachment 1) Bernard W. Graham, Ph.D., Committee Chair

2. Recommend Approvals: (Attachment 2A, 2B) Libby Yeager, Dean of Curriculum
 - A. Program Additions, Deletions, and Modifications
 - B. Senior Citizen Waiver for Credit Courses Policy (revised) Dr. Rosana Reyes, Vice President, Enrolment Management and Student Affairs

3. New Enrollment & Retention Initiatives Dr. Reyes and Sue Spry, Acting Vice President, Academic Affairs
 - CRM, AI Chatbot, Online Tutoring
 - Nursing Program
 - Children & Early College Summer Camps

4. Diversity, Equity and Inclusion Update Dr. Reyes

5. Next meeting tentatively scheduled for 4:30 p.m., Thursday, August 18th, 2022

Academic Program Report
June 2022

**Report Summary:
Modifications:**

The **Mathematics (AS.MAT)** program has been modified to align with transfer institution requirements.

The **Electrical Construction Technology (AAS.ECT, CS.ECT)** programs have been modified to align with current industry standards and address changing employer needs.

The **Building Maintenance Technology (CS.BLD)** program has been modified to align with current industry standards and address changing employer needs.

The **Computer Systems & Security Technology (AAS.CST)** has been modified to current industry standards and address employer needs.

The **Electronics Engineering Technology (AAS.EET)** has been modified to current industry standards and address employer needs.

The following program proposals have been approved by the Academic Committee of the Senate, the Senate, and VP of Academic Affairs. Each proposal meets all requirements for a program.

Approved Program Modifications

Program Name: **Mathematics (AS.MAT)**

Rationale: Update program to align with transfer institutions

Department: Mathematics

Department Chair: Nicole Saporito

Total Enrollment:

Graduates:

FA/2017	8	2016-17	2
FA/2018	9	2017-18	2
FA/2019	9	2018-19	2
FA/2020	14	2019-20	2
FA/2021	8	2020-21	0

Faculty: Fulltime -- 6 in department

Adjunct -- 10; 2.87 FTE

2 other department; 0.47 FTE

1 classified; 0.40 FTE

Academic Program Report
June 2022

Program Mission/Description – The Math curriculum is designed for students to transfer to a four-year program in Mathematics. Students with a background in mathematics have many opportunities for employment in such fields as engineering, research, education, actuarial science and cryptography.

Goals

This program provides the student the opportunity to:

- Understand content specific materials offered in the program
- Develop the mathematical skills to lay the foundation for continued professional development.

Learning Objectives

The graduate of this program will be able to:

- Find, Organize, and Present information effectively using technology
- Choose from a variety of proof techniques and apply that technique correctly to a mathematical claim
- Demonstrate knowledge of multivariable applications of calculus.
- Identify patterns, make connections to known results, form a conjecture and test.

REQUIRED COURSES

CIS 158 – C++	3	MAT 151 – Analytical Calculus I	4
COS 230 – Data Structures	3	MAT 251 – Analytical Calculus II	4
ENG 101 – English Composition	3	MAT 252 – Analytical Calculus III	4
ENG 102 or 104– Advanced Composition	3	MAT 240 – Introduction to Abstract Math	3
FYE 101 – First Year Experience	1	MAT 280 – Differential Equations	4
General Elective	3	PHY 151 – Calculus-based Physics I	4
Health and Wellness Elective	1	PHY 152 – Calculus-based Physics II	4
Health and Wellness Elective	1	Critical Thinking Elective	6
Cultural Awareness/Diversity Electives	6	SPE 125 – Fundamentals of Speech	3
MAT 107 – Basic Statistics	3		

Academic Program Report
June 2022

Program Name: **Electrical Construction Technology (AAS.ECT)**

Rationale: Update program to align with changing industry skill standards and address employer needs

Department: Applied Technology

Department Chair: Brandon Babbish

Total Enrollment:

Graduates:

FA/2017 --	39	2016-17 -	8
FA/2018 --	43	2017-18 -	9
FA/2019 -	46	2018-19 -	11
FA/2020 --	38	2019-20 -	8
FA/2021 --	36	2020-21 -	8
Faculty: Fulltime --	1 in department	Adjunct --	2; 0.67 FTE

Program Mission/Description – Base theories of electricity, household and industrial electrical maintenance and the use of hand and power tools. Practical training on various types of electrical services and repair and installation are included. Training will also include electric motors, transformers, large motor controllers, commercial and industrial power systems, multi-dwellings, multi-meter services, and national electric code. Upon completion of the program, possible employment positions include electrician’s helper, lineperson’s helper, and electrical parts counterperson, or for the more experienced, opportunities as an industrial maintenance or construction electrician, self-employment in residential or commercial wiring, or sales representative for an electrical manufacturer or distributor.

Goals

This program provides the student the opportunity:

- to understand the basic design and planning of electrical distribution systems.
- to acquire the skills to enable successful employment in the electrical industry.

Learning Objectives

The graduate of this program is able to:

- demonstrate the ability to wire three phase WYE and DELTA commercial and industrial distribution systems.
- apply the appropriate basic national electric code section to the electrical installation.
- demonstrate the use of mathematical formulas and theory to compute the appropriate electrical circuit parameters.
- demonstrate the ability to install, wire and troubleshoot electrical fixtures, transformers, motors and service panel boards.
- prepare for successful completion of Journeyman and State electrical exams through mastery of the national electrical code.
- demonstrate an understanding of the hazards associated with electrical circuits and equipment by developing a procedure for prevention of injury.

Academic Program Report
June 2022

REQUIRED COURSES

ENG 101	English Composition I	3	CEL 119	National Electrical Code II	3
MAT 103	Math for Industry	3	CEL 120	Electric Motors	3
CEL 101	D.C. and A.C. Fundamentals	4	CEL 121	Electric Motor Control I	4
CEL 103	Basic Construction Wiring	3	CEL 130	Power Systems	3
CEL 109	Blueprint Reading & Estimating	3	GET 203	Intro. Programmable Logic Control	3
FYE 101	First Year Experience	1	CEL 298	Internship	2
CEL 112	Advanced Electrical Construction	4	CEL 122	Electrical Motor Control II	4
CEL 116	National Electric Code I	3	CEL 132	Transformers	3
ENG 261	Technical Communications (or SPE 125)	3	PLH 105	Controls for Heating Systems OR	4
	Critical Thinking Elective	3	HAC 106	Controls for Air Conditioning	3
PHY 103	Physics for Trade Technologies	3		Cultural Awareness Elective	3
	Health & Wellness Elective (recommend EMS 207)	1	CEL 299	Internship	3
Total credits: 69					

Program Name: Electrical Construction Technology (CS.ECT)

Rationale: Update program to align with changing industry skill standards and address employer needs

Department: Applied Technology

Department Chair: Brandon Babbish

Total Enrollment:

FA/2017 --	6	2016-17 -	1
FA/2018 -	4	2017-18 -	3
FA/2019 -	6	2018-19 -	1
FA/2020 -	7	2019-20 -	0
FA/2021 --	8	2020-21-	1
Faculty: Fulltime -	1 in department	Adjunct -	2; 0.67 FTE

Graduates:

Program Mission/Description - Base theories of electricity, household and industrial electrical maintenance and the use of hand and power tools. Practical training on various types of electrical services and repair and installation are included. Upon completion of the program, possible employment positions include electrician's helper, lineperson's helper, and electrical parts counterperson.

Goals

This program provides the student the opportunity:

- to understand the principles and practices of residential and small commercial wiring.

Academic Program Report
June 2022

Learning Objectives

The graduate of this program is able to:

- demonstrate an understanding of the principles of basic electricity and have the ability to read blueprints for residential and small commercial wiring.
- wire and troubleshoot basic motor control circuits through effective interpretations of wiring diagrams.
- design and bend electrical conduit systems.

REQUIRED COURSES

MAT 103	Math for Industry	3	PLH 105	Controls for Heating Systems	4
CEL 109	Blueprint Read. & Estimating	3	CEL 112	Advanced Electrical Constr.	4
CEL 116	National Electric Code I	3	CEL 132	Transformers	3
CEL 103	Basic Construction Wiring	3	CEL 121	Electrical Motor Control I	4
CEL 101	D.C. and A.C. Fundamentals	4			

Program Name: Building Maintenance Technology (CS.BLD)

Rationale: Update program to align with changing industry skill standards and address employer needs

Department: Applied Technology

Department Chair: Brandon Babbish

Total Enrollment:

Graduates:

FA/2017 --	2	2016-17 -	2
FA/2018 --	3	2017-18 -	1
FA/2019 -	3	2018-19 -	4
FA/2020 --	1	2019-20 -	4
FA/2021 --	1	2020-21-	1

Faculty: Fulltime – 2 in department

Adjunct – 7; 2.5 FTE (adjuncts teach across 3 program areas)

Program Mission/Description - The building maintenance certificate is designed for the student who wants a diversified knowledge in the technical trade skills. The student will acquire an understanding in theory and laboratory skills for electrical, plumbing, heating and air conditioning systems. Qualified students may gain entry level positions in a variety of technical occupations such as maintenance electricians, maintenance plumbers.

Academic Program Report
June 2022

Goals

This program provides the student the opportunity to:

- acquire basic skills needed for troubleshooting, repairing or replacing plumbing, heating and air conditioning equipment.

Learning Objectives

The graduate of this program is able to:

- explain the basic theory of electric motors and related devices.
- install various types of water pipe materials, fittings, fixtures, and appliances.
- solve and explain methods to prevent potential contamination of drinking water.
- describe the proper procedures to recover, recycle, and reclaim CFC's refrigerants.
- explain the purpose and operation of refrigerant controlled devices.

REQUIRED COURSES

HAC 101	Basic Air Conditioning OR	4	CEL 121	Electric Motor Control I OR	4
CEL 101	D.C. and A.C. Fundamentals		HAC 103	Warm Air Heat & A/C Des/Inst	
CEL 103	Basic Construction Wiring	3	HAC 106	Controls for Air Conditioning	4
PLH 116	Mech. Piping Methods	4	PLH 122	Intro to Hydronic Heat Syst OR	4
PLH 105	Controls for Heating Syst. OR	4	CEL 121	Electric Motor Control I	
CEL 112	Advanced Electrical Const.		MAT 103	Math for Industry	3

Total Credits: 30

Program Name: **Computer Systems and Security Technology (AAS.CST)**

Rationale: Update program to current industry standards

Department: Applied Technology

Department Chair: Brandon Babbish

Total Enrollment:

Graduates:

FA/2017 --	35	2016-17 -	5
FA/2018 --	27	2017-18 -	2
FA/2019 -	27	2018-19 -	4
FA/2020 --	29	2019-20 -	4
FA/2021 --	37	2020-21 -	4

Faculty: Fulltime -- 1 in department

Adjunct -- 0; 0.00 FTE

1 other department; 0.20 FTE

Program Mission/Description - The mission of the Computer Systems and Security Technology program is to provide students with the skills necessary to work as a support technician within organizations that provide and utilize diverse IT infrastructures. All of the core courses in the curriculum have practical components that provide students with hands-on experience utilizing essential diagnostic hardware and software development tools. The curriculum focuses on building critical thinking and problem solving skills with an emphasis on practical applications. Students will refine their skills in the areas of operating systems, computer networks and data security. The program will also prepare a student for further studies and/or certification in areas such as network engineering, information security assurance, forensic computer analysis and advanced cyber security.

Goals

The program provides the student the opportunity to:

- Acquire specific knowledge of operating systems, network hardware and security features relevant to professionals within an IT team.
- Acquire relevant skills to prepare the student for career and advanced certifications or degrees.

Learning Objectives

The graduate of this program is able to:

- Function effectively on teams to solve IT related problems utilizing software diagnostic tools.
- Sustain (setup, maintain, and evaluate) network environments.
- Identify and analyze user needs and take them into account in the selection, creation, evaluation or administration of computer-based systems.
- Create (design, program and implement) a secure computer network system.
- Operate (work with, setup, or evaluate) basic analog and digital electronic test equipment effectively.

REQUIRED COURSES

CJU 215 Cyber Crime	3	CST 225 Systems Networking	4
CST 103 Operating Systems	3	CST 227 Linux Operating Systems	3
CST 105 Microcomputer Architecture & Multimedia	3	CST 230 TCP/IP and Network Routers	3
CST 132 Computer Forensics	3	EET 120 Electrical Theory	4
CST 115 Data Communications Infrastructures	3	EET 205 Digital Circuits	3
CST 220 Network Security Issues	3	ENG 101 English Composition	3
CST 221 PC Security Issues	2	ENG 261 Technical Communications or SPE 125	3
		EMS 207 or HPE 207 CPR	1

Academic Program Report

June 2022

FYE 101 First Year Experience	1	Or MAT 101 Survey of Mathematics	3
GET 134 Introduction to Computer Programming	3	PSY 103 Gen Psychology	3
MAT 111 Technical Mathematics	3	PHI 150 Introduction to Philosophy	4
		PHY 121 Tech Physics	

Program Name: Electronics Engineering Technology (AAS.EET)

Rationale: Update program to current industry standards

Department: Applied Technology

Department Chair: Brandon Babbish

Total Enrollment:

Graduates:

FA/2017 --	38	2016-17 -	15
FA/2018 --	37	2017-18 -	4
FA/2019 -	32	2018-19 -	13
FA/2020 --	21	2019-20 -	3
FA/2021 --	16	2020-21 -	4
Faculty: Fulltime --	2 in department	Adjunct --	0; 0.00 FTE

Program Mission/Description - The AAS degree in Electronics Engineering Technology is designed to provide both the theory and practical applications of electronic engineering technology. The purpose of the program is to prepare graduates for entry-level positions in industry, business and government; for computer / electronic equipment design, installation, servicing and operation; and for entry into such high tech specialties as microprocessors, biomedical equipment, telecommunications, and opto-electronics. Qualified students enrolled in this program may be considered for application to Tobyhanna Army Depot's Pathways Program. Credits earned in this program are also transferable to a four year degree.

Goals

This program provides the student the opportunity to:

- understand the concepts of analog and digital circuits and systems.
- acquire skills required to be successful in the Electronics Engineering Technology field.

Learning Objectives

The graduate of this program is able to:

- Perform circuit analysis in both DC and AC networks.
- Analyze, construct and trouble-shoot discrete and integrated amplifier circuits and digital systems using schematics.
- Explain the architecture and program a typical microprocessor using assembly language.
- Analyze, construct and trouble-shoot electronic systems involving radio and microwave frequencies.

Academic Program Report
June 2022

- Analyze, construct and trouble-shoot electronic circuitry employed in the industrial process control environment.

REQUIRED COURSES		
EET 131 D.C. Electricity	4	GET 107 Electronic Drafting 2
EET 132 A.C. Electricity	4	GET 102 Maintenance Procedures or
EET 135 Electronic Devices	4	GET 134 Intro to Computer Programming or
EET 201 Electronic Amplifier Circuits	4	CIS 158 C++ Programming 3
EET 205 Digital Circuits	3	Health & Wellness Elective 1
EET 224 Electronic Communications	4	Cultural Awareness/Diversity Elective 3
EET 226 Microprocessors	4	MAT 111 Technical Mathematics or
EET 228 Industrial Electronics and Process Control	4	MAT 151 Calculus I 3/4
ENG 101 English Composition	3	Physics (Minimum PHY 131- General Physics I) 4
ENG 102 Advanced Composition or	3	Physics continue sequence 4
ENG 104 Advance Composition/Literature	3	Oral Communications 3
FYE 101 First Year Experience	1	Critical Thinking Elective 3

AB

TITLE: SENIOR CITIZEN WAIVER FOR CREDIT COURSES POLICY

DATE(S) OF POLICY AND POLICY REVISION APPROVALS: June 26, 2001, May 20, 2022

The senior citizen status at the Community College is for those Pennsylvania residents who have reached the age of 62 years. Senior citizens will be given a tuition waiver for credit courses on a space-available basis at the close of registration. ~~Senior citizens may pay tuition for credit courses to secure enrollment. Enrollments secured with payment will be given preference for class entry, but will not be eligible for waivers.~~ The senior citizen tuition waiver does not apply to fees and other costs incurred. Only tuition for credit courses can be waived for senior citizens according to this policy. Some courses and/or programs have a limited number of seats available, which may disallow any waivers for that class. The College secures the right to exempt any of its courses or programs from the senior citizen tuition waiver. If the College exempts a course or program from the senior citizen tuition waiver it will be noted in the College course catalog.

RELATED PROCEDURES: